

POLYBOND ACRYLIC ST 100

FIBRE REINFORCED ELASTOMERIC ACRYLIC COATING WATERPROOFING MEMBRANE

DESCRIPTION

Polybond Acrylic ST 100 is a water-based, one-component, elastomeric, acrylic-modified polymer fibre reinforced waterproofing coating and cures into a rigid elastic waterproofing membrane.

Polybond Acrylic ST 100 has excellent weathering resistance, elongation and crack bridging properties.

POLYBOND ACRYLIC ST 100 has been tested by SIRIM QAS International Sdn. Bhd. in accordance to BS 1881 Part 122 : 1983, on Water Absorption Test and complied with the specification in this data sheet.

OUTSTANDING FEATURES

Ready-to-use, one-component system :

- Environmentally friendly
- Non-toxic and non-flammable
- Low VOC content
- Elastomeric
- Crack bridging ability
- Compatible with cement mortar adhesive
- Applies easily by roller or brush as a coating system provides fully bonded monolithic waterproofing membrane
- Able to take foot traffic when fully cured
- Can be coated over with elastic paint when full cured
- Can be tiled over successfully

TYPICAL USES

Polybond Acrylic ST 100 is designed to use as exposed or concealed waterproofing membrane for :

- RC roof deck
- Roof tiles
- Metal roof & gutters
- RC concrete car porch decks
- RC gutters
- External walls
- Parapet walls
- Kitchen, bathrooms, balconies, terraces

TECHNICAL SPECIFICATION

Typical properties at 25°C and 50% Relative Humidity conditions and environment :

Resin	Acrylic Polymer
Appearance	Thixotropic Paste With Fibres
Solids	63.0 ± 2.0%
Specific Gravity	1.28 ± 0.03
Viscosity	30,000 – 40,000 cps
Re-coating Time (second layer)	≥ 60 mins
Colour	Grey, White
Recommended Coverage	1.0kg/m ² , (2)-coats at 0.5kg/m ² /coat

PHYSICAL PROPERTIES

Physical properties of the membrane (in dry state) :

Water Vapour Transmission (ASTM E96/E96M-16)	< 0.5 g/(m ² .h)
Tensile Strength (ASTM D 412-16)	> 2.00 N/mm ²
Elongation at break (ASTM D 412-16)	> 300%
Pull-off Adhesion Strength (ASTM D 7234-12)	> 1.50 N/mm ²
Hydrostatic Pressure Resistance test for 1-hour (ASTM 5385/5385M-93)	No water leaking under max pressure of 90 psi
Hardness (Shore A) (ASTM D-2240)	Approx. 70
QUV accelerated weathering @ 2,000 cycles (ASTM G 53)	No colour change No blistering

SURFACE PREPARATION

Substrate surfaces must be thoroughly cleaned and dry before applying **Polybond Acrylic ST 100** coating waterproofing membrane.

All substrate surfaces must be sound, clean, dry and free of dust, grease, wax, oil, laitance, curing compounds, excess mortar, loose particles or other contaminants that are likely to affect the coating bonding.

Cracks, honeycombs and other defects must be repaired using suitable cement mortar.

All joints shall be prepared and filled with a suitable filler or sealant.

PRIMING

Prime substrate surfaces with acrylic primer at the rate of 5-8m² per litre depending on the substrate condition before **Polybond Acrylic ST 100** application.

APPLICATION

Stir **Polybond Acrylic ST 100** to an even smooth paste emulsion consistency before use.

Polybond Acrylic ST 100 can be applied onto the prepared substrate surfaces using a roller or brush. Place the material well onto the substrate surfaces to achieve a full bond.

The application of **Polybond Acrylic ST 100** waterproofing coating shall be done in a minimum of (2)-layers with criss-cross manner, the first layer in one direction and the second layer in a direction perpendicular to the first layer. Apply the subsequent layers after 2-4 hours drying of the previous coat.

CURING

The finished **Polybond Acrylic ST 100** must be protected before fully cured. Curing shall be at least 72-hours to yield optimum strength.

When **Polybond Acrylic ST 100** is used as a concealed waterproofing membrane, protection boards or sheets must protect the waterproofing membrane before backfilling or topping with mortar or concrete.

PACKAGING AND STORAGE

Polybond Acrylic ST 100 is available in sealed and air-tight 20kgs pail.

Polybond Acrylic ST 100 has a shelf life of at least 12-months in an unopened / undamaged pail. Store in a protected cool dry place. It must not be stored in open sunshine.

HEALTH AND SAFETY

Polybond Acrylic ST 100 is non-hazardous and non-toxic.

All tools, equipment and surrounding areas can be cleaned with clean water before the product sets.